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Serge Champseix

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EXAMINER

SHABMAN, MARK A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,688	Applicant(s) CHAMPSEIX ET AL.	
	Examiner MARK SHABMAN	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see page 11, filed 11 June 2008, with respect to the 112 rejection of claims 6-11 (new claims 19-24) have been fully considered and are persuasive. The rejection under 35 USC 112 of those claims has been withdrawn.

Applicant's arguments filed 11 June 2008 in response to the rejections under 35 USC 103(a) have been fully considered but they are not persuasive.

Applicant argues that the rejection of the originally filed claim 1 of which all limitations are now included in the new claim 14 was improper as the Melet reference relied upon uses four separate motors thereby separating the syringes out of the block as claimed. It is noted that the claim as it stands does not include any mention of a single motor to drive all of the syringes in the block simultaneously. The "air pump" of the Melet reference is separate from the rest of the syringes which is the main difference between the invention as claimed and the Melet reference. However as noted in the previous and current rejection, making the three syringes integral with the air pump (which is also a syringe) would have been obvious to one of ordinary skill in the art at the time of invention.

In regards to the arguments directed towards the remaining dependent claims, Applicant argues that none of the secondary references teach the use of a syringe as

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an air pump as is claimed throughout the application. However, as these references are not relied upon for such a teaching, the arguments are not considered to be persuasive.

Claim Objections

Claims 27, 28, 29, 30 and 31 are objected to under 37 CFR 1.75 as being a substantial duplicates of claims 19, 20, 21, 22 and 23 respectively. In for example claim 19, the limitation of "may be fixed" is recited. It is understood that this includes the fixed structure which is claimed in claim 27 and therefore the claims are considered duplicates. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32, 33, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the case of the above claims, respective claims 27, 28 and 29 all contain the phrasing "and/or" which implies the possible exclusion of the second limitation. For example, if the alternative form of "or" is chosen, claim 27 would be interpreted as "The syringe block according to claim 14, wherein said

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syringe block comprises at least one dilution chamber, which is fixed on the collector."

Therefore, claim 27 would comprise the exact wording of claim 32 and claim 32 would not be necessary. The same applies to claims 33 and 34.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15, 17-20, 23, 26-28 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melet.

Regarding **claim 14**, Melet discloses an automatic hematologic counting and analyzing device comprising a pump assembly containing 3 pistons in a casing and piston as is the definition of a syringe (column 2 lines 29-33) which reads on the "at least two syringes" as claimed. As syringes, in between the casing and piston is defined an internal volume as claimed. There also exists an "air pump" 14 in the form of a syringe which is part of the unit, thus reading on the pump as claimed. Further included is a collecting portion comprising electronic switch valves EV1-EV15 in figure 1, to which "ducts" are connected. A first set of said ducts connects electronic switch valves to the internal volume of the syringes and a second set of said ducts connects the same electronic switch valves "in the direction of respective containers for the sample and/or other liquids" as is seen in figure 1. Melet does not disclose the "syringe

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block" including the air pump syringe attached to the others. Examiner notes that it is not explicitly claimed that the syringes are all attached to one another, however, since the preamble describes the apparatus as a "syringe block" this is seen as a possibility. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the separate syringes together to reduce the number of motors if desired, or simply place them all together for easier access should one or all need to be cleaned or replaced. It has also been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Regarding **claim 15**, the apparatus of Melet uses only one syringe as an air pump. It would have been obvious to one of ordinary skill in the art at the time of invention to duplicate said syringe to create an air pump which uses two syringes so that air could be supplied to two areas of the system by compressing the pistons of the syringes a single time instead of having to compress the pump two times opening and shutting valves in between.

Regarding **claim 17**, the air pump 14 draws liquid from the container 4 into the measuring chamber 20 by reducing the pressure within the chamber prior to the counting step (column 4 lines 19-38).

Regarding **claim 18**, after the method of Melet is finished, the waste is expelled via means of the air pump (column 5 lines 36-39), reading on the claim in its entirety.

Regarding **claim 19**, items 3 and 4 in figure 1 of Melet are described as dilution containers (column 4 lines 5-10), reading on the claimed "at least one dilution chamber"

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which can be seen to be "linked direct to a respective electronic switch valve" by a "second duct" (figure 1).

Regarding **claim 20**, a "measurement chamber" is described in Melet as item 20 of the figure illustrated. Since the device in Melet is described as an apparatus comprising many parts, it is understood that said measurement chamber is "fixed on" the collector in order to operate in conjunction with the ducts.

Regarding **claim 23**, the invention disclosed in Melet does not include an optical bench as claimed, however it would have been obvious to one of ordinary skill in the art at the time of invention to include such a bench in any type of sampling machine to aid in the viewing and analysis of blood samples as they are analyzed.

Regarding **claim 26**, the invention disclosed in Melet is used for automatic analysis of blood, thus reading on the claim.

Regarding **claim 27**, items 3 and 4 in figure 1 of Melet are described as dilution containers (column 4 lines 5-10), reading on the claimed "at least one dilution chamber" which can be seen to be "linked direct to a respective electronic switch valve" by a "second duct" (figure 1).

Regarding **claim 28**, a "measurement chamber" is described in Melet as item 20 of the figure illustrated. Since the device in Melet is described as an apparatus comprising many parts, it is understood that said measurement chamber is "fixed on" the collector in order to operate in conjunction with the ducts.

Regarding **claim 31**, the invention disclosed in Melet does not include an optical bench as claimed, however it would have been obvious to one of ordinary skill in the art

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at the time of invention to include such a bench in any type of sampling machine to aid in the viewing and analysis of blood samples as they are analyzed.

Regarding **claim 32**, It would have been obvious to one of ordinary skill in the art at the time of invention to fix the dilution chamber on the collector to make the entire sampling/analying apparatus of Melet into a single unit for ease of operation.

Regarding **claim 33**, a "measurement chamber" is described in Melet as item 20 of the figure illustrated. Since the device in Melet is described as an apparatus comprising many parts, it is understood that said measurement chamber is "fixed on" the collector in order to operate in conjunction with the ducts.

Claims 16, 22, 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melet as applied to claim 1 above, and further in view of Bachenheimer US patent 4,607,526 (hereinafter referred to as Bachenheimer).

Regarding **claim 16**, Bachenheimer discloses a particle analysis system containing a face plate member and a mating flexible member, one of which has a plurality of passages (abstract). The passages provide a path for the various fluids to follow within the system (column 3 lines 50-56). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the passageways of Bachenheimer with the apparatus of Melet in order to create a system which is capable of operating on small volumes of fluid and to reduce the amount of connecting tube required.

Regarding **claim 22**, Bachenheimer discloses a series of passages as described in the rejection of claim 3. These passages are seen as "vessels" for transporting fluids, thus reading on the "hydraulic circulation vessel" as claimed.

Regarding **claim 24**, Bachenheimer discloses the use of electronic circuits in the process of blood analysis (column 4 lines 39-44). These circuits would have to be on some sort of "card" as claimed which would be able to be fixed to the detector if required.

Regarding **claim 30**, Bachenheimer discloses a series of passages as described in the rejection of claim 3. These passages are seen as "vessels" for transporting fluids, thus reading on the "hydraulic circulation vessel" as claimed.

Claims 21, 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melet as applied to claim 1 above in view of Kim US Patent 5,648,225 (hereinafter referred to as Kim).

Regarding **claim 21**, Melet discloses the claimed invention with the exception of an incubation chamber. Kim discloses a method for analysis of a blood sample. Kim describes in the background of the invention the need for incubation when analyzing blood sample and in column 3 lines 58-63 the use for incubation in the analysis method disclosed. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Melet to provide an incubation chamber or means for incubating the blood within one of the chambers 20, 21, or 22 to help denature the cell surface antigens to promote hemoglobin clumping to aid in counting.

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Regarding **claim 29**, Melet discloses the claimed invention with the exception of an incubation chamber. Kim discloses a method for analysis of a blood sample. Kim describes in the background of the invention the need for incubation when analyzing blood sample and in column 3 lines 58-63 the use for incubation in the analysis method disclosed. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Melet to provide an incubation chamber or means for incubating the blood within one of the chambers 20, 21, or 22 to help denature the cell surface antigens to promote hemoglobin clumping to aid in counting.

Regarding **claim 34**, providing the incubation chamber as disclosed in claims 21 and 29 above would allow for the chamber to be "fixed on the collector as claimed.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melet as applied to claim 1 above in view of Jottier US Patent 4,231,990 (hereinafter referred to as Jottier).

Melet discloses the claimed invention with the exception of placing the syringe block in an air conditioned unit. Jottier discloses an apparatus for the treatment of fluids which can be used in the medical field for blood analysis (column 4 lines 27-38). The apparatus contains a cooling device consisting of a closed loop circuit in which fluid flows (column 1 lines 57-64). Since blood is sensitive to temperature and must be kept cool for proper storage and analysis, it would have been obvious to one of ordinary skill in the art at the time of invention to maintain a cool temperature surrounding the system while analysis was taking place. This could be accomplished a number of ways

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including simply lowering the temperature of the testing room to prolong the survival of the blood sample.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK SHABMAN whose telephone number is (571)270-3263. The examiner can normally be reached on M-F 7:30am - 5:00pm, EST (Alternating Fridays Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. S./

Examiner, Art Unit 2856

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856